

**Applicant:** Flecknoe-Brown et al.  
**Application No.:** 10/580,524

**REMARKS**

After the foregoing Amendment, claims 22, 24, and 26-39, and 41-42 are pending in this application. Claims 28-39 are withdrawn. This Reply amends claims 22, 26, and 42, and cancels claim 40. These amendments introduce no new matter into the application.

**Claim Rejections - 35 USC § 112**

The Action rejects claims 22, 24, 26, 27, and 40-42 under 35 USC § 112, first paragraph, as allegedly failing to comply with the written description requirement. Obviating amendments are made.

Applicant respectfully requests withdrawal of the claim rejections under 35 USC § 112.

**Claim Rejections - 35 USC § 103**

The Action rejects claims 22 and 40-42 under 35 USC § 103 as obvious over White (DE 2357970); claims 24 and 26, as obvious over White in view of Diaz (US 2004/0226451); and claim 27 as obvious over White in view of Diaz and French 2736923. Applicant respectfully traverses these rejections.

Independent claim 22 is directed to "[a] method of maturing wine in bulk." Similarly, independent claim 41 is directed to "[a] method of maturing a beverage

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other than table wine in bulk." The Action cites White as teaching "a process wherein wine is matured in a closed container made of plastic (e.g. polyethylene) wherein oxygen is allowed to permeate the walls of said container to facilitate maturing of wine." Page 3. Applicant has obtained a copy of Australian specification 62813/73 ("Australian Specification"), which claims priority from the same priority document as White, namely GB 54238/72. For the Examiner's convenience, Applicant attached to this Reply a copy of the Australian Specification. Applicant believes that the Australian Specification has a better degree of readability than the EPO machine translation of the German specification of DE 2357970 ("Translation") provided by the Office. Applicant also believes that the Australian Specification may clarify some of the issues noted in the Action. Although the claims of the two related applications differ, Applicant believes that the specifications are substantially identical after translation, with differences as to grammar and idiom.

Referring to the Australian Specification, page 2, beginning at line 1, indicates that the invention "is particularly concerned with a process for the preparation of wines which have the 'mature' characteristic flavour of French wines..." The corresponding passage of the Translation can be found at paragraph 1. It is significant that the word "mature" is identified by quotation marks, suggesting that the word is used in a sense which is different from that normally associated with conventional maturation of wines.

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This becomes clear when referring to page 3, lines 1-3 and 7-9 of the Australian Specification, which states “[t]o obtain wine of the desired flavour the fermentation is carried out in a vessel made of a film or membrane of material of the plastics class, for example polyethylene...[the c]hoice of a satisfactory plastics film, together with the above mixture of starting materials and a desired yeast strain produce a finished wine having a satisfactory flavour.” (Underline emphasis added). The corresponding passage of the Translation can be found at paragraph 3.

The reference to “a finished wine” suggests that the maturation and fermentation processes are being carried out at the same time in a plastics vessel. This is further illustrated by the passage beginning on page 4, line 10 of the Australian Specification which reads “[b]y employing the processes of the present invention both fermentation and maturing periods are drastically shortened.” The corresponding passage of the Translation can be found at paragraph 3. Another passage illustrating this point begins on page 10, line 14 of the Australian Specification, and reads “[i]n addition to imparting a desirable authentic ‘French’ grape wine flavour to the finished wine, a feature of the process is that the flavour of the wine is essentially that of a ‘mature’ wine. Little or no maturing period, therefore, is necessary for this wine.” (Underline emphasis added). The corresponding passage of the Translation can be found at paragraph 27.

White’s use of the word “mature,” as an adjective in relation to wine, does not imply in any way that the method involves maturation in the sense accepted by

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those skilled in the art. Such is in fact not possible. It is generally understood by those skilled in the art that maturation of red wine only proceeds after the secondary (malo-lactic) fermentation (MLF) is completed. The reason for this is that red wine cannot have SO<sub>2</sub>, the usual wine preservative, added until MLF is completed because free SO<sub>2</sub> suppresses that MLF.

Maturation involves REDOX reactions that occur slowly and with extremely limited oxygen supply, in the presence of SO<sub>2</sub>. Fermentation involves the reproduction and metabolic activity of yeast, an aerobic organism requiring a plentiful supply of oxygen. The rate of oxygen entry required to sustain a ferment is thousands of times greater than the desired rate for maturation.

Comparing White's disclosure with Applicant's claims, it is crucial to realize that Applicant does not envisage carrying out fermentation and maturation at the same time, and in fact does not refer to fermentation at all. The claims are directed solely towards oxygen-limited, time extended maturation alone, after fermentation is completed. Nor does the invention of Applicant's claims seek to drastically reduce time for maturation. On the contrary, Applicant's claims require that the wine be stored for a time period "ranging from four to thirty-six months." The type of maturation which Applicant's invention tries to achieve is similar to that which can be achieved after fermentation by maturation in oak barrels over an extended period of time, with oxygen uptake far less than is the case with White. The resulting wine is of a higher quality than that produced by White. Applicant's

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claims require that maturation be carried out for at least four months and preferably longer, up to thirty six months, to obtain the appropriate degree of maturation.

It is also significant that the only reference to the period of time in White appears at lines 2-12, on page 4, indicating that fermentation over a period of about “5 to 21 days” should be sufficient to carry the fermentation out to completion. A person of ordinary skill in the art would recognize from White’s disclosure that the referenced time occurs during fermentation, and hence the period of “maturation” and fermentation are considered to be co-terminus. Even if another period follows, White teaches that it is “drastically shortened.” *Id.* White therefore actually teaches away from Applicant’s invention as claimed, which requires at least four months maturation.

In a sense, the teachings of White are similar to those of Hickinbotham (US 2003/0194302) discussed in paragraphs 27 to 35 of the Declaration by Flecknoe-Brown in response to the Office Action dated September 5, 2008. In other words, White and Hickinbotham teach away from slow “maturation” over long periods, and teach that the plastic container has a high rate of oxygenation leading to rapid “maturation.” The disadvantages of Hickinbotham, discussed in the previous Reply and Declaration, apply to White as well.

White’s disclosure is of necessity directed to films of plastics material. This is because a vessel with walls stiff enough to be “self supporting,” as Applicant claims,

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will generally be much too thick to allow oxygen in at sufficient rates to sustain a ferment in a closed vented vessel (*i.e.*, one having a one way ferment lock).

The Australian Specification, at the bottom of page 4, indicates that the oxygen is free from infective microorganisms, having been filtered by the plastics films. The corresponding passage of the Translation can be found at paragraph 8.

It would be reasonable to assume that White's vessel is vented, as in the case with Hickinbotham, to prevent it having direct contact with the atmosphere, which would otherwise allow entry of infecting microorganisms. A person of ordinary skill in the art would therefore conclude that oxygen transfer to the wine is solely through the plastic film. As a viable fermentation requires substantial oxygen access, the plastic film must have a much higher rate of oxygen transfer than would be appropriate with the maturation of Applicant's claims.

White also makes a statement which is at odds with the general thrust of its own disclosure on page 5, lines 13-16, which reads "[u]nder these conditions suitable wines may be produced by fermenting in a plastics or other vessel which does not allow oxygen to gain access to the vessels' contents by diffusion." The corresponding passage of the Translation can be found at paragraph 9. Apart from the fact that this is the opposite of what the rest of the specification teaches, such oxygen limited fermentation generally results in the formation of sulphiltes, as there is no oxygen present to oxidize the sulphides to sulphates. As a result, a strongly off taste would develop in the wine because of the formation of hydrogen suiphide.

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Thus by having a combined fermentation/oxygenation “maturation” step, White teaches away from Applicant’s claims in two respects, namely the storage period is shorter, and there is no maturation in the sense understood by those skilled in the art. Furthermore in providing as an alternative, an anaerobic fermentation step, White again teaches away from Applicant’s claims by excluding oxygen required for slow maturation. White’s inconsistent approaches would deter a person of ordinary skill in the art from looking to this reference to create “a method of maturing wine” as Applicant claims.

Diaz and French 2736923 fail to remedy the deficiencies of White discussed above.

Applicant respectfully requests withdrawal of the claim rejections under 35 USC § 103.

### **Conclusion**

If the Examiner believes that any additional matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner’s convenience.

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In view of the foregoing amendment and remarks, Applicant respectfully submits that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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Enclosure